

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. – 17. (Cancelled)

18. (currently amended) An electronic apparatus forming one of a sensor, an actuator and a ~~control~~ controller and that communicates with an additional electronic apparatus through an integrated bus interface, the electronic apparatus comprising:

a control engine;

a device-specific definition engine in which at least one of communication, function and configuration parameters are stored, wherein the device-specific definition engine is in a device-specific format and the parameters are accessible by the control engine; and

a universal definition engine that is in a device-independent, standardized format, that stores each of the communication, function and configuration parameters and additional parameters characterizing the electronic apparatus and that automatically generates the device-specific definition engine.

19. (currently amended) The electronic apparatus of claim 18, comprising wherein one device-specific elements including element includes at least one of control engine elements, manufacturer-specific device profiles, functional elements of a configuration

unit provided for the electronic apparatus and documentations automatically generated from the universal definition engine.

20. (currently amended) The electronic apparatus of claim [[18]] 19, wherein the manufacturer-specific device profile is independent of ~~application-specific circumstances such as~~ a bus protocol and wherein an application-specific device profile is generated from the manufacturer-specific device profile.

21. (previously presented) The electronic apparatus of claim 18, wherein respective version information is stored for at least one of the parameters stored in the universal definition engine.

22. (previously presented) The electronic apparatus of claim 18, wherein functional dependencies between individual parameters are stored in the universal definition engine.

23. (previously presented) The electronic apparatus of claim 18, wherein the universal definition engine is formed by at least one file.

24. (previously presented) The electronic apparatus of claim 23, characterized in that the file is in XML format.

25. (previously presented) The electronic apparatus of claim 18, wherein the device-specific definition engine is provided inside the electronic apparatus.

26. (previously presented) The electronic apparatus of claim 18, wherein the device-specific definition engine is provided at least partly separate from the electronic apparatus.

27. (previously presented) The electronic apparatus of claim 18, further comprising references automatically generated by the device-specific definition engine to device-specific elements present outside of the electronic apparatus, so as to control elements of a configuration unit provided for the electronic apparatus.

28. (previously presented) The electronic apparatus of claim 18, wherein the device-specific engine is addressed for different electronic apparatuses by a control unit connected to the data bus, in particular by a configuration unit provided for the electronic apparatus, using a uniform, standardized command transported to the control engine through the data bus.

29. (currently amended) The electronic apparatus of claim 18, wherein a configuration unit is connected to the data bus, wherein the device-specific definition engine is addressed and evaluated by the configuration unit, and the configuration unit includes [[a]] different device-specific ~~functional extent in dependence~~ functions that depend on parameters read out of the device-specific definition engine.

30. (previously presented) The electronic apparatus of claim 29, wherein the configuration unit is provided as a computer program.

31. (previously presented) The electronic apparatus of claim 29, wherein visualization parameters stored in the universal definition engine are converted into corresponding visualization parameters of the device-specific definition engine and wherein an interface of the configuration unit changes based on the visualization parameters read out of the device-specific definition engine.

32. (previously presented) The electronic apparatus of claim 29, wherein functional dependencies stored within the universal definition engine are converted into functional elements of the configuration unit and wherein dependencies between parameters are checked by the configuration unit using the functional elements.

33. (previously presented) The electronic apparatus of claim 22, wherein the functional dependencies are converted into control engine elements and wherein dependencies between parameters are checked by the control engine using the control engine elements.

34. (currently amended) A bus system, comprising:

a data bus; and

a plurality of electronic apparatuses connected to the data bus, each electronic apparatus forming one of a sensor, an actuator and a control controller and comprising:

a control engine;
a device-specific definition engine in which at least one of communication, function and configuration parameters are stored, wherein the device-specific definition engine is in a device-specific format and the parameters are accessible by the control engine; and

a universal definition engine that is in a device-independent, standardized format, that stores each of the communication, function and configuration parameters and additional parameters characterizing the electronic apparatus and that automatically generates the device-specific definition engine.